

5003-02

Remarks

Reconsideration of claims 1-56 is respectfully requested.

In the Office action dated May 20, 2004 (application Paper No. 0504), the Examiner rejected a set of the pending claims under 35 USC §§ 102(b) and 103(a). A number of the claims were found to contain patentable subject matter. The Examiner's rejections will be addressed below in the order presented in the Office action.

35 USC § 102(b) Rejection - Claims 1-4, 46, 47 and 53-56

The Examiner first rejected claims 1-4, 46, 47 and 53-56 under 35 USC 102(b) as being anticipated by US Patent 5,180,288 (Richter et al.). In particular, the Examiner cited Richter et al. as teaching "a method and apparatus of an anisotropically etched prism assembly". The Examiner went on to state that "Richter et al. do not explicitly disclose an alignment portion used to align the light coupling portion and the device portion. However, Richter et al. disclose the device portion and the light coupling portion are interconnected side by side; therefore, it would inherently meet the limitation of the claim[s]".

In response, applicant asserts that the cited Richter et al. reference is directed to an electrostatic pump (see *Abstract*) that is formed as a microminiature unit by exploiting the etching qualities of silicon to form a grid-like structure 11 with pyramidally shaped etched openings 12 formed therethrough (see FIG. 1). There is no discussion or suggestion of a "light coupling assembly" in Richter et al., which is precisely the subject matter of the present invention as defined by the rejected claims. In that vain, therefore, there is no discussion, suggestion or anticipation of forming a "device portion" including at least a pair of optical devices and a "light coupling portion" including at least a pair of "anisotropically etched coupling elements", the devices and etched coupling elements formed so as to be in alignment. Anisotropic etching, *per se*, may be disclosed in Richter

5003-02

et al., but there is no teaching of a device or method utilizing anisotropic etching in the manner defined by the present invention to form a "light coupling assembly".

Without this teaching, applicant asserts that Richter et al. cannot be found to anticipate the subject matter of claims 1-4, 46, 47 and 53-56, as suggested by the Examiner. Applicant therefore respectfully requests the Examiner to reconsider this rejection and find these claims, as amended, to be in condition for allowance over the Richter et al. reference. Indeed, independent claims 1, 53 and 56 have been amended to more correctly define the structure and method of the present invention as including two components: a first component comprising "a plurality of" of optical devices and a second component comprising "a plurality of" of optical coupling elements (anisotropically etched and disposed in alignment with the optical devices). Thus, the subject matter of each claim has now been amended to further define a "light coupling assembly" including these two components. Applicant asserts that the above-described amendments to the claims have been made to more accurately and succinctly define the proper subject matter of this invention, and should be considered as allowable over Richter et al.

35 USC § 103(a) Rejection - Claims 45 and 48

Claims 45 and 48 were separately rejected by the Examiner under 35 USC 103(a) as being unpatentable over Richter et al. (as cited above). In the rejection of claim 45, the Examiner stated that "Richter et al. disclose all of the limitations of the claimed invention except for the anisotropically etched prism being KOH. However, it is a well known material". With respect to claim 48, the Examiner state that "the AWG is considered to be obvious, since it is commonly used in an optical communication system". Thus, the Examiner concluded by rendering both claims obvious in light of the teachings of Richter et al.

5003-02

In response, applicant reiterates the above assertion that Richter et al. does not disclose or even suggest the formation of a "light coupling assembly". Richter et al. is limited to teaching the formation of an electrostatic pump. There is no teaching of forming an "optical device", a "coupling element", or providing alignment between the optical device and coupling element by using anisotropic etching. Based on this lack of teaching, applicant respectfully requests the Examiner to reconsider this rejection and find claims 45 and 48 to be in condition for allowance.

Allowable Subject Matter

The Examiner, in the Remarks section of the Office action, cited pending claims 5-7, 9-28, 32, 33, 37-44 and 49-52 as "objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims". Since applicant is convinced that the subject matter of the rejected base claims is indeed allowable over the cited reference, applicant believes that the cited dependent claims continue to be allowable in their original dependent form.

Summary

Applicant believes that with these amendments, this case is now ready to issue. It is asserted that the subject matter of the present invention is allowable over the cited Richer et al. reference, which is considered to be directed to non-analogous art. Applicant therefore respectfully requests the Examiner to reconsider the rejections and find this case ready to issue. New claims have been added that address additional subject matter from the specification. Moreover, since applicant believes that generic claims 1,

5003-02

4 and 5 are now allowance, it is respectfully requests that the Examiner reconsider the claims drawn to the non-elected species - that is, claims 8, 29-31 and 34-36 - and also find these claims to also be allowable, as provided by 37 CFR 1.141.

Further, the specification has been reviewed and corrections of a typographical nature are being submitted for consideration by the Examiner, as well as corrections to FIGs. 51, 90 and 91. With these corrections, applicant believes that the specification and drawings are correct, and upon receipt of a Notice of Allowance, formal drawing sheets will be filed.

If for some reason or other the Examiner does not agree that the case is ready to and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicant's attorney at the telephone number listed below.

Respectfully submitted,

Shrenik Deliwala
Robert Keith Montgomery

By: Wendy W. Koba
Wendy W. Koba
Reg. No. 30509
Attorney for applicant
610-346-7112

Date: 7/30/04